

Response to FCC Docket No. 17-108 ("Restoring Internet Freedom")
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I think my feelings about this NPRM can best expressed by responding to a few quotes from it.

"We believe that Internet service providers offer the 'capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications.'

[...]

In contrast, Internet service providers do not appear to offer 'telecommunications,' i.e., 'the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received,' to their users. For one, broadband Internet users do not typically specify the 'points' between and among which information is sent online. Instead, routing decisions are based on the architecture of the network, not on consumers' instructions, and consumers are often unaware of where online content is stored."

By this logic, I run an information service in my apartment by having a \$40 home router, despite the fact that I neither want it to filter, transform¹, or bandwidth-throttle the information I can access, nor do I have it configured for any such. As far as the *content* is concerned (i.e., the IP packets and their contents), I treat my internet service provider (Comcast, in my case) not as the origin of the information or as a transformative agent, but as a carrier of it - I use the service provided by my ISP to interact with Wikipedia (say), not the ISP's web services - with my email server, not the ISP's. I specify the 'point' on which information is sent to and received from by specifying the IP addresses in my packets (usually, using the layer of indirection of domain names and DNS).

In forwarding IP packets to and from me, the ISP's network no doubt does a lot of transformation on the link layer, but by the same token, the phone company does a lot of transformation in electrical connections (or, nowadays, TDM slots) when I make a phone call - but we call a phone company a common carrier, even though information is routed through the phone network "based on the architecture of the network". An ISP router does "store" a packet in the time between when it is received and re-transmitted, but this storage time is usually measured in microseconds or milliseconds, and said storage is typically sacrificed in cases of network congestion.

"federal law [draws] a line between the heavily regulated common carrier services and more lightly regulated services that [go] beyond mere transmission"

In practice, I - and most other people - use our ISPs as if they are a common carrier. ISPs sometimes provide services above the simple forwarding of IP packets - email accounts, say - but this is not the use-case in question. I agree that the FCC doesn't need to regulate the ISP's email service, but the matter at question is not application-layer services, but (inter)network-

¹ at least, not beyond the constraints imposed by IPv4 address scarcity, and that affects the network- and transport-layer headers in a non-intrusive manner and doesn't touch the application-layer information

layer services, for which I treat the ISP (when I'm using the Internet) much the same way I treat a phone company (when I'm making a phone call). I do not think they should have the ability to transform my Internet service by, say, bandwidth-throttling only certain applications whose traffic goes over their network - allowing them to do that raises barrier-of-entry concerns for providers of Internet applications (who pay for their own Internet access as it is), as well as freedom-of-speech concerns.

"[The FCC] decided to apply utility-style regulation to the Internet. This decision represented a massive and unprecedented shift in favor of government control of the Internet."

I believe ISPs *should* be considered utilities for the purposes of the relevant regulation. They have natural-monopoly characteristics - only a few sources of network access are available in most residences. For broadband, I can choose Comcast, AT&T... and that's it - and these are available as a consequence of their effective monopoly on cable and twisted-pair phone line to my residence (respectively). I certainly pay my ISP like it's a utility.

The Introduction implies that the proposed rule change is intended to promote a "free and open Internet." I believe a free and open Internet is desirable, too; that's why I believe Title II regulation of ISPs is warranted, as a requirement for ISP users to be able to use the Internet freely as they desire.

[Just in case there's any confusion, this does not represent the opinion of my employer, Indiana University; I don't know what their stance on this NPRM is.]